IN THE CLAIMS:

The pending claims are set forth below and have been amended and/or cancelled, without prejudice, where noted:

1-28. (Canceled)

29. (Previously Presented) A system for supplying a polymerization catalyst to a polymerization reactor comprising:

a) a storage vessel adapted to contain a concentrated catalyst slurry of solid catalyst particles in a diluent liquid;

b) a mixing vessel connected to said storage vessel by at least one slurry conduit extending from said storage vessel to said mixing vessel;

c) a transfer conduit extending from said mixing vessel to provide for the transfer of catalyst slurry from said mixing vessel to said polymerization reactor;

d) a diluent supply line for supplying a diluent liquid to said concentrated catalyst slurry to provide for a diluted catalyst slurry in said mixing vessel.

e) a cocatalyst storage vessel adapted to contain a cocatalyst;

f) a cocatalyst supply line extending from said cocatalyst storage vessel to said transfer conduit to bring said cocatalyst into contact with said diluted catalyst slurry;

g) an enlarged contact vessel interfaced in said transfer conduit between the connection of said cocatalyst supply line to said transfer conduit and said polymerization reactor.

30. (Previously Presented) The system of claim 29 further comprising a dump vessel for receiving waste from at least one of said mixing vessel, said storage vessel and said slurry conduit.

31. (Previously Presented) The system of claim 30 wherein said transfer conduit is provided with a pump at a location at an intermediate of said mixing vessel and said enlarged contact vessel.

32. (Previously Presented) The system of claim 31 wherein a section of the

transfer conduit between said pump and said mixing vessel extends from said mixing vessel to the location of said pump upwardly from said mixing vessel by an angle of at least 10°.

33. (Previously Presented) The system of claim 32 wherein a section of said transfer conduit between said pump and said contact vessel extends downwardly from said pump by an angle of at least 10°.

34. (Currently Amended) The system of claim 33 wherein said section of said transfer conduit extending from said mixing vessel to said pump extends upwardly from said mixing vessel to said pump by an angle of at least 30° ~~and said section transfer conduit between said pump and said contact vessel extends downwardly from said pump by an angle of at least 30°~~.

35. (Previously Presented) The system of claim 30 further comprising a waste conduit extending from said mixing vessel to said dump vessel.

36. (Previously Presented) The system of claim 35 further comprising a pump in said slurry conduit at a location intermediate of said storage vessel and said mixing vessel.

37. (Previously Presented) The system of claim 36 wherein a section of said slurry conduit between said pump and said storage vessel extends from said storage vessel to the location of said pump upwardly from said storage vessel by an angle of at least 10°.

38. (Previously Presented) The system of claim 37 wherein a section of said slurry conduit between said pump and said mixing vessel extends downwardly from said pump by an angle of at least 10.

39. (Previously Presented) A system for supplying a polymerization catalyst to a polymerization reactor comprising:

a) at least two storage vessels adapted to contain a concentrated catalyst slurry; each of said storage vessels having an inlet line adapted to receive a concentrated slurry of catalyst particles;

b) slurry conduits extending from each of said storage vessels to a mixing vessel and provided with metering valves to control the flow rate of catalyst slurry to said mixing vessel;

c) a transfer conduit extending from said mixing vessel to said polymerization reactor;

d) a diluent line connected to said transfer conduit for supplying diluent to said transfer conduit; and

e) a dump vessel adapted to receive catalyst waste and an input line to said dump vessel extending from at least one of said mixing vessel and said slurry transfer conduits.

40. (Previously Presented) The system of claim 39 further comprising a cocatalyst storage vessel and a cocatalyst conduit extending from said cocatalyst storage vessel to said transfer line.

41. (Previously Presented) The system of claim 40 further comprising an enlarged contact vessel interfaced in said transfer conduit between said reactor and the connection of said cocatalyst supply conduit to said transfer line.

42. (Previously Presented) The system of claim 41 wherein said transfer conduit is provided with a pump at a location at an intermediate of said mixing vessel and said enlarged contact vessel.

43. (Previously Presented) The system of claim 42 wherein a section of the transfer conduit between said pump and said mixing vessel extends from said mixing

vessel to the location of said pump upwardly from said mixing vessel by an angle of at least 10°.

44. (Previously Presented) The system of claim 43 wherein said section of said transfer conduit extending from said mixing vessel to said pump extends upwardly from said mixing vessel to said pump by an angle of at least 30°.

45. (Previously Presented) The system of claim 44 wherein a section of said transfer conduit between said pump and said contact vessel extending downwardly from said pump by an angle of at least 10°.

46. (Cancelled)

47. (Previously Presented) A method for supplying a catalyst to an ethylene loop polymerization reactor comprising:

a) providing a concentrated slurry of olefin polymerization catalyst particles in a storage vessel;

b) supplying said concentrated catalyst slurry from said storage vessel through a slurry conduit to a mixing vessel;

c) adding a diluent liquid to said concentrated catalyst slurry in order to provide a diluted catalyst slurry in said mixing vessel;

d) withdrawing said diluted catalyst slurry from said mixing vessel and supplying said diluted catalyst slurry through a transfer conduit to a slurry loop polymerization reactor in which ethylene is polymerized;

e) mixing a cocatalyst with said diluted catalyst slurry prior to supplying said diluted catalyst slurry to said slurry loop polymerization reactor; and

f) subsequent to the mixing of said cocatalyst with said diluted catalyst slurry passing said diluted catalyst slurry containing said cocatalyst through a section of said transfer conduit to provide for an increased contact time of said cocatalyst with said dilute catalyst slurry prior to the introduction of said catalyst slurry into said polymerization reactor.

48. (Previously Presented) The method of claim 47 wherein said cocatalyst is brought into contact with said dilute catalyst slurry while said catalyst slurry is transferred from said mixing vessel to said polymerization reactor through said transfer conduit extending from said mixing vessel to said polymerization reactor and wherein the contact time of said cocatalyst with said dilute catalyst slurry is increased by flowing said catalyst slurry through a chamber of increased volume in said transfer conduit at a location between the mixing of said cocatalyst with said slurry and the introduction of said slurry into said polymerization reactor.

49. (Previously Presented) The method of claim 47 wherein the concentrated slurry in said storage vessel has a concentration of a particulate catalyst solids within the range of 10-50 weight percent and the diluted catalyst slurry within said mixing vessel has a concentration of solid catalyst particles within the range of 0.1-10 weight percent.

50. (Previously Presented) The method of claim 49 wherein the concentration of particulate catalyst solids in said storage vessel is within the range of 20-40 weight percent and the concentration of particulate catalyst particles in said diluted catalyst slurry in said mixing vessel is within the range of 0.1-5 weight percent.

51. (Previously resented) The method of claim 50 wherein the concentration of diluted catalyst solid catalyst particles in said diluted catalyst slurry is within the range of 0.5-4 weight percent.